

**GRAVEL PACKING APPARATUS HAVING AN INTEGRATED
SENSOR AND METHOD FOR USE OF SAME**

ABSTRACT OF THE DISCLOSURE

A gravel packing apparatus (310) has an outer tubular (312) having a plurality of openings (314) therethrough and a sand control screen assembly (318) disposed within the outer tubular (312). The sand control screen assembly (318) prevents the flow of particulate material of a predetermined size therethrough but allows the flow of production fluids therethrough. Sensors (354-360) are operably coupled to the outer tubular (312), the sand control screen assembly (318) or both. An instrument line (348) disposed between the outer tubular (312) and the sand control screen assembly (318) is operably associated with the sensors (354-360) such that power, signals and data may be transmitted between the sensors (354-360) and the surface or other downhole systems.